PARAMETER ADJUSTING DEVICE FOR PROCESS MODEL, PARAMETER ADJUSTMENT SUPPORTING DEVICE AND ITS METHOD

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- international:

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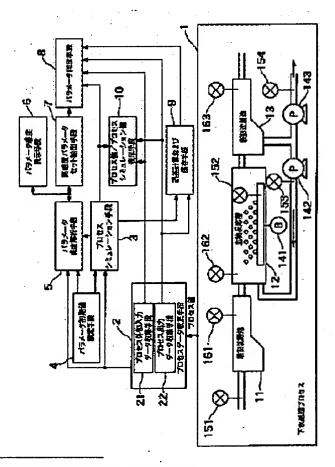
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Abstract of JP2002328702

PROBLEM TO BE SOLVED: To allow a process engineer who does not fully understand the internal structure of process, to easily execute parameter adjustment. SOLUTION: A process model parameter adjusting device is provided with a process data collecting means constituted of a process external input collecting means and a process output collecting means, a means for simulating a process model having a parameter set constituted of a plurality of parameters by inputting data supplied through the process data external input collecting means, a means for setting the initial value of the parameter of the process model, a means for analyzing the change of the sensitivity of the parameter, a means for extracting a parameter set whose sensitivity is high based on the analyzed result of the sensitivity, and a means for defining the values of the respective parameters of the parameter set so that an error between the process output simulation value and the process output value can be minimized.



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TI: Parameter adjusting device for sewage treatment, identifies value of parameters that are extracted based on sensitivity analysis result of each parameter

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NOVELTY - A parameter identification unit (8) identifies AB: the value of each parameter of a parameter set that is extracted by an extraction unit (7) based on the result of sensitivity analysis of the parameter set, so that the difference between a simulation value calculated by a process model and an output value measured by a process output collection unit (22) is set to minimum. DETAILED DESCRIPTION -INDEPENDENT CLAIMS are also included for the following: (1) a parameter adjustment support apparatus; and (2) the adjustment of parameters.; USE - For simulating the behavior of chemical processes, biological processes such as sewage treatment, food processing and petroleum refining. ADVANTAGE - A person with little knowledge of the internal structure of the process can adjust the parameter simply. DESCRIPTION OF DRAWING(S) - The figure shows a block diagram explaining sewage treatment using the parameter adjusting device. (Drawing includes non-English language text). Extraction unit 7 Parameter identification unit 8 Process output collection unit 22

PA: (TOKE) TOSHIBA KK;

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IC: C02F-003/12; G05B-013/02; G05B-013/04;

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